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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,268	01/13/2004	John W. Baldridge	700145.4003	3601

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EXAMINER

BARRY, CHESTER T

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,268

Applicant(s)

BALDRIDGE ET AL.

Examiner

Chester T. Barry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 26-35 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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Claims 26 – 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 26-35 were added by preliminary amendment on 1/13/04, the actual filing date of this continuation 10/757,268 of parent 09/948,457 (now USP 6,699,391 B2). The oath or declaration of the '268 application did not specifically refer to the subject matter of the new claims 25 – 36 added on 1/13/04. Accordingly, insofar as the subject matter of claims 25 – 36 does not appear to have adequate written descriptive support in parent application 09/948,457, that subject matter is considered to be new matter vis-à-vis this application even though it was filed on the same day the present application was filed.

Claims 26 – 35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,699,391 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of patent claim 1 falls within the

scope of pending application claim 26. Please see the claim analysis below:

Patented claim 1	Application Claim 26
<p>1. A method for reducing biofilm in an aqueous system, comprising the steps of:</p> <p>providing a mixture containing enzymes and surfactants, wherein said mixture comprises lipase, and</p> <p>introducing the mixture to an aqueous system containing biofilm.</p>	<p>26. A method for reducing biofilm in an aqueous system, comprising the steps of:</p> <p>providing a mixture containing a surfactant and a yeast fermentation product, and</p> <p>introducing the mixture to an aqueous system containing biofilm.</p>

The expression “enzymes” recited in the patented claim falls within the scope of the expression, “yeast fermentation product,” recited in the application claims, while the remaining recitations correspond. Accordingly, patent claim 1 falls within the scope of application claim 26. Should this claim 26 issue in a patent subsequently assigned to a party other than the then-owner of the ‘391 patent, a third party practicing the subject matter of patent claim 1 (of the ‘391 patent) would be subject to suit by two parties under separate patents for the same conduct.

This rejection may be overcome by filing a terminal disclaimer, or by pointing out why all the application claims are narrower in scope than the broadest patented claim, and not obvious thereover. In the latter case, no terminal disclaimer would be necessary.

Claim 26 is rejected under 35 USC Sec. 102(e) as anticipated by USP 6454871 to Labib. Labib describes¹ a method for reducing biofilm in an aqueous system, comprising the steps of providing a mixture containing **a surfactant and an alcohol**, and introducing the mixture to an aqueous system containing biofilm. Alcohol is widely recognized as a yeast fermentation product. Claim 26 does not require that the alcohol used in the mixture have been made by a yeast fermentation product. The claim merely requires that the material in the mixture be capable of being made by a yeast fermentation product. Insofar as the material described by Labib, i.e., "an alcohol," is so capable of being made, the limitation of claim 26 is met by Labib's disclosure.

Claim 26 is rejected under 35 USC Sec. 102(e) as anticipated by USP 6348187 to Pan. Pan describes² a method of killing bacteria in a biofilm of an aqueous system comprising adding a mixture of ethanol and a surfactant to the aqueous system.

¹ From the 19th paragraph of Labib's Brief Summary of the Invention:

In accordance with the method of the present invention, a mixture of gas and a suitable liquid, preferably including one or more cleaning agents, is used to create a mixed-phase flow along a surface, which creates shear or impact stresses or similar conditions sufficient to remove **biofilm**, debris and contaminants from their surfaces. The cleaning agent is commonly a **surfactant**, but **may also** be or **include** an oxidizing agent, **an alcohol**, a non-surfactant detergent or a solid material. . . .

(emphasis added)

² From the 36th paragraph of Pan's Brief Summary :

The hydrogen peroxide in combination with at least one surfactant has been found to provide substantially equivalent and even enhanced antimicrobial activity of the essential oils for reduced alcohol and alcohol-free compositions compared to that exhibited by an antiseptic mouthwash having high

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USP 6812196 is cited for disclosure of use of a mixture for controlling biofilms and biofouling or slimes in aqueous systems. The mixture comprises an anionic surfactant in combination with alcohol that is "only sparingly soluble" in water (defined as <20% soluble in water). Examples include n-butanol, but not ethanol. See col 4 line 40.

USP 4349628 suggests³ that n-butanol cannot be produced by yeast fermentation.



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PRIMARY EXAMINER

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alcohol levels on the order of about 27% v/v. A convenient reference point is the antimicrobial activity exhibited by a high alcohol level [Listerine-brand] mouthwash; i.e., one which contains about 27% v/v ethanol. Expressed in terms of an "R-Factor," which, as explained below, represents the time necessary to effectively kill typical oral cavity microbes in an in vitro biofilm, normalized against the kill time exhibited in vitro by a 27% v/v Listerine.RTM.-brand mouthwash, the mouthwash compositions of this invention exhibit an R-Factor of less than about 2, preferably less than about 1.2, and most preferably less than about 1.0.

(emphasis added)

³ Brief Summary Text - BSTX (20):

The process and apparatus of the present invention are particularly suitable for the production of ethanol using a yeast fermentation process, but it is envisaged that they are also suitable for the preparation of products such as isopropanol, butanol or acetone using other fungal fermentations or bacterial fermentations.

(emphasis added)